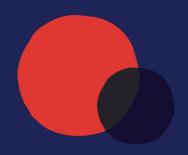
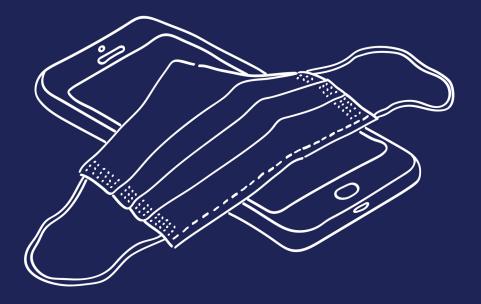
PRIVACY AND DATA PROTECTION IN THE PANDEMIC

Report on the Use of Apps and Alternative Measures in Brazil



Clarice Tavares Enrico Roberto Juliana Fonteles da Silveira Nathalie Fragoso





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ABOUT US

InternetLab is a Brazilian internet policy think tank that works towards building the intellectual and evidential foundation for public awareness, action, and policy-making, by delivering sophisticated evidence-based and impact-oriented social and legal research, as well as analysis to identify and clarify critical issues

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INTRODUCTION

NATIONAL Background

Brazil was severely hit by the Covid-19 pandemic, undeniably a particularly challenging public health emergency. The country has been the epicenter of the pandemic in South America since registering the first case on February 26, 2020 (Brazilian Health Ministry, 2020). It was one of the countries in which Covid-19 spread the fastest (Darlan et al., 2020), reaching more than 8 million cases and 200 thousand deaths by January 2021. This placed it as the nation with the third highest number of cases of Covid-19 worldwide, behind India and the United States, and as the country with the second highest number of deaths, behind the United States (John Hopkins University, 2020). The proliferation of Covid-19 cases was rapid and constant, and the R number's remained above 1 for months.

To adequately understand the public health measures taken and the institutional players responsible, we must look at the Brazilian Unified Health System (*Sistema Único de Saúde*, SUS), a federal, mostly centralized and public healthcare system, and its prominent role in tackling the pandemic. We will consider both the medical services SUS offers and its public healthcare management system, its chronic underfunding, which was exacerbated by the freezing of public expenditure in 2016 (Araújo, 2018), as well the challenges it faces in the Brazilian political context.

INTRODUCING THE SUS

The SUS was established in 1988, together with the Constitution of the Federative Republic of Brazil, aiming to offer full, universal, and free healthcare services. It is one of the largest healthcare systems in the world and, according to the Brazilian National Health Survey of 2019,² it is estimated that 150 million Brazilians are entirely dependent on it.

The importance of the SUS stems from the universal and free nature of its coverage, its comprehensive services, the decentralization of its management and administrative functions, and the fact that it offers medical services countrywide. These characteristics explain why the system, in addition to vaccine distribution, always had the potential to reduce the pandemic's impact through the free provision of testing, hospitalization, basic care, and the monitoring and dissemination of information on healthcare measures in the most remote regions. However, the current Brazilian political climate and demographic reality are at the root of why the actual measures taken against Covid-19 have fallen short of their potential.

¹ R is the number of people that one infected person will pass on a virus to, on average. https://www.bbc.com/news/health-52473523

² https://www.ibge.gov.br/en/statistics/social/health/16840-national-survey-of-health.html?=&t=o-que-e

PANDEMIC LEGAL FRAMEWORK

Normative inflation" or juridification at the three federal levels (federal, state and municipal), as well as frequent judicialization, are characteristics of Brazil's response to the pandemic in the legal sphere.

At the federal level, Law No. 13.979/2020, the so-called "Quarantine Law," which was passed in February, authorized public authorities to adopt measures to isolate infected people and, in general, restrict activities and services in order to halt the spread of the virus. Provisional Measure (MP) No. 926, of March 2020, amended this law to grant the President of the Republic the power to legislate which public services and essential activities should be preserved during the public health measures. This provisional measure was challenged before the Federal Supreme Court (STF), which acknowledged the concurrent authority of the Union, States, Municipalities, and the Federal District to legislate on the matter, thus giving local and federal legislative bodies the power to differ from the MP.

Later, in July 2020, Law No. 14.019/2020 amended this law to include the mandatory use of masks in closed spaces, and Provisional Measure No. 926 was later converted into Law No. 14-035/2020, allowing the restriction of entry and exit from the country through ports, airports and highways.

To block the measures taken to contain the pandemic, President Jair Bolsonaro vetoed this amendment, only for the national Congress to subsequently overturn his veto. He has also criticized and discouraged state governments from imposing quarantine and lockdown measures.

Law No. 14.010/2020 provided for the Emergency and Transitional Legal Regime of Private Legal Relations (RJET) during the Covid-19 pandemic. The nationwide state of public emergency was decreed through Legislative Decree No. 6 of 2020. An additional decree enacted the World Health Organization's International Health Regulations (IHR) which provides for exceptional and rights-restricting measures in contexts of health emergencies.

Despite their importance, these norms have been accompanied by a litany of other, arguably less important ones, whose sheer number have helped to weaken the impact of all pandemic-related laws in Brazil, as well as confuse the authorities aiming to take legal Covid-19 containment measures. In 2020, 3,049 laws related to Covid-19 were adopted in the Brazilian federation; 59 of these are provisional measures enacted by the Presidency. Among the effects of such intense normative activity ("normative inflation" or juridification) was the dismantling of emergency regulations, the limitation of the Legislature's role, and the intensification of legal controls in health policy as other actors – such as political parties, the president (to suspend orders decreed by governors) and individuals – attempted to promote judicial control over the acts of the Executive at federal and local levels (CONECTAS, CEPEDISA, 2021).

EVOLVING DATA PROTECTION FRAMEWORK

An intense debate on data protection took place in parallel with the health crisis, and also because of it, which meant there was a degree of legal insecurity regarding the regulatory framework governing data protection in Brazil. Proposals to postpone the entry into force of the General Data Protection Law (LGPD), approved in 2018 and initially scheduled for implementation in August 2020, were presented, debated and considered. Furthermore, there was significant delay creating the National Data Protection Authority (ANPD), responsible for executing data protection laws.

Crucial to this debate's outcome was the Supreme Court's decision regarding rules that provided for exceptional data processing. On April 17, the Federal Government issued Provisional Measure (MP) No. 954, which allowed for the sharing of data from fixed telephones and personal mobile telephone lines to the Brazilian Institute of Geography and Statistics (IBGE). The measure, which the President is empowered to enact (art. 62 of the Brazilian Federal Constitution), was motivated by the "need for timely production of data for monitoring the Covid-19 pandemic" and to ensure the Continuous National Household Sample Survey (PNAD-Contínua) – a population census which incorporates information on education, labor, income and housing.

Because MPs come into force immediately, on April 17, IBGE enacted Normative Instruction No. 2/2020, detailing how data should be made available to the institute. On April 20, Direct Unconstitutionality Actions were presented to the Federal Supreme Court requesting the provisional suspension of MP No. 954/2020 and the declaration of the rule for the enactment of provisional measures as unconstitutional and art. 5, items X and XII of the Constitution (Federal Council of the Brazilian Bar Association - ADI 6387, PSDB - ADI 6388, PSB - ADI 6389, PSOL - ADI 6390 and PCdoB - ADI 6393). On April 24, Supreme Court Justice Rosa Weber granted an injunction to suspend the MP and prevent "irreparable damage to the privacy and confidentiality of more than one hundred million users of fixed and mobile telephone services." The other justices highlighted the fundamental right to data protection, noting the importance of information self-determination and the need to pay attention to data protection principles, including and especially in times of crisis – even before the LGPD, Law 13.709/2018, came into force (which occurred in September 2020).

The Court's decision has had repercussions on the public and legislative debate. The ANPD was effectively created in August, and its board of directors was appointed in October. Despite the legal uncertainty surrounding the initial pandemic- and data protection-related regulations in Brazil, the WHO's International Health Regulations (IHR), incorporated into national law by Decree No. 10.212/2020, was able to provide some clarification regarding data protection, especially through its determination that data processing must be adequate, relevant and compatible with the goals of their original collection.

SCOPE AND GOALS

This report seeks to analyze the Brazilian government's response to the pandemic, the effectiveness of technological means and alternative measures on strengthening public health, the possible effect on access to public policies and the democratic participation of vulnerable groups. To this end, we analyze the federal "Coronavírus-SUS" contact tracing app and the partnerships with the private sector that resulted in the availability of heat maps and the calculation of the social isolation index, as well as alternative measures to restrict movement. This analysis aims to understand how and why these solutions have worked (or not) in the Brazilian context and their risks and impacts on security, privacy, inequality and social justice from a human rights and public health perspective.

We conducted five semi-structured interviews between September 2020 and October 2020 with the following authorities: an officer from the state government of São Paulo, a Federal Public Defender (DPU), two specialists in healthcare and healthcare data, and a civil society organization specialist with experience in migration issues. Their names are, respectively, Cátia Martinez, João Chaves, Pedro de Paula, Daniel Dourado, and Camila Asano. To preserve their privacy, no opinion has been individually attributed to any one of them.

PILAR 1 - EFFICACY OF THE RESPONSES FROM A PUBLIC HEALTH PERSPECTIVE



The contact tracing application, Coronavírus-SUS, so far, has not been effective from a public health point of view. It was made available late, was not publicized, its use was not encouraged, and it competed with other applications provided by public agencies or private actors. On the other hand, the app itself seems to follow current good practices and offers little risk of function creep. Other measures adopted during the pandemic, by contrast, have posed significant risks and raised concerns, as addressed below in Pillar 2.

ONE AMONG MANY: APPS AGAINST COVID-19

The technological measures that were already part of the SUS repertoire of tools were mobilized during the pandemic and new tools were developed. Within the federal government, this became the Coronavírus-SUS application, which initially focused on providing information. Later, it turned into a contact tracing app to notify users in case of contact with a person infected with Covid-19. In terms of applications, at least eight smartphone apps have been made available by government bodies with functions including remote healthcare, provision of ancillary services and contact tracing. These initiatives emerged from all three federal levels: municipal – Cachoeirinha and Saúde Osasco, state – Atende em Casa (Pernambuco), Coronavírus SP (São Paulo) and Telemedicine Paraná (Paraná), and federal – Coronavírus-SUS.

When analyzed for transparency³ and compliance with the data protection principles of necessity and security (even before the LGPD came into force), most applications fell short of these requirements, indicating exposure of some users. Examples of such risks are undisclosed data traffic between the apps and private domains, absent or poorly written privacy policies, collection of unnecessary or poorly justified data, and excessive permissions requested from the user. The apps have not yet been submitted to oversight and there are no legal cases pending regarding them.

CHANGING NATURE, SCOPE AND ROLE OF CORONAVÍRUS-SUS IN THE FEDERAL COVID-19 STRATEGY

The federal government application, Coronavírus-SUS, was initially launched to raise public awareness about Covid-19 and contained information on symptoms, prevention, guidelines in the case of suspected or actual infection, a map indicating nearby health facilities, and the official news page of the Health Ministry about the pandemic. Therefore, its initial objective was to use the SUS mandate to raise awareness of diseases, providing

information at the beginning of the pandemic to control spread. Furthermore, the app also originally presented figures on the epidemiological situation in states and the country as a whole.

However, our analyses have shown that each update of the app involved some transformation in scope and function. The functionality of presenting numbers about the epidemiological situation was dropped. Later, providing information about the user's health through a button indicating "good" or "bad", as well as a map showing the nearest healthcare facility and news about Covid-19 were removed.

Beginning in July, the federal government application began offering contact tracing capabilities through a partnership between the Ministry of Health, Google and Apple (API Exposure Notification). Since then, the application has focused essentially on notifying users who have allegedly had contact with an infected person. This was adopted without prior discussion or consultation about which are the most effective methods for contact tracing.

Authorities worldwide launched contact tracing applications with the aim of identifying as many infected people as quickly as possible, to inform quarantine, testing and isolation measures. This strategy's main objective is to obtain anonymized data and aggregate epidemiological patterns to assist in the adoption of effective containment measures.

Given these purposes, the Brazilian application seems to have been adopted with no connection to the national public health strategy. The use of data on infections to seek focused and specific solutions – one of Coronavírus-SUS's supposed original objectives – has never been a priority of the federal executive. With the dizzying increase in the number of cases and deaths in June, the Ministry of Health began to omit data related to Covid-19, taking its official portal offline on June 5, only to later reinstate it without presenting the accumulated numbers of confirmed cases and deaths, under the pretext of introducing a new platform. The "data blackout" was not a single incident nor the result of carelessness. In November, the episode was repeated. President Jair Bolsonaro had previously issued Provisional Measure No. 926 on March 23, 2020, whose purpose was to amend the Quarantine Law to clarify that government authorities are not obliged to respond to any request for information during the state of public emergency if the authority is "adopting a work from home and quarantine regime". This seemingly confusing justification is in clear violation of what is guaranteed by the federal Access to Information Law.

This also highlights a contradiction and the fragility of federal policies focused on public health: on the one hand, technological solutions are implemented to optimize controlling the spread and the number of deaths and infections; on the other, there is little willingness to use health data as a means of providing information and raising public awareness.

The technological solution did not have a concrete execution plan. The low number of downloads compared to the total Brazilian population, the lack of dissemination, and a coordinated campaign to expand the app's use contributed to the plan being ultimately disregarded and dropped from the discourse of public health authorities and the federal government. The lack of technical studies by the Ministry of Health, the failure to integrate the app into other measures, and the disregard for data in the formulation of public policy reveal little effort to instrumentalize this tool.

TO WHAT END? CORONAVÍRUS-SUS FROM A PUBLIC HEALTH PERSPECTIVE

ACCESS

One of the advantages of the Bluetooth data collection method – the solution adopted by Coronavírus-SUS – is an assumption about its ubiquity (Becker, Li, Starobinski, 2019; Zhao, Wen, Lin, Xuan, Shroff, 2020), that is, that it is present in everyone's life through the use of smartphones. However, in the countries of the Global South, including Brazil, this premise cannot be assumed, as there are significant barriers impeding widespread access to technology.

Brazil is a country marked by inequalities perpetuated by governments that have historically disconnected social policies from macroeconomic issues and adopted a logic of simple "poverty management" (da Silva, 2010). This makes it difficult to facilitate increased access to public services, such as health and telecommunications, creating obstacles to achieving the constitutional goals of universalization.

Thus, when analyzing the implementation of public policies in Brazil, including those directly related to public health in a pandemic, it is necessary to consider inclusivity. This approach is essential because broad access and adherence are crucial for contact tracing to be effective. More than 20% of the Brazilian population ten years of age or older did not have a smartphone in 2018 (IBGE, 2018). This is even more marked in rural areas, which already has less access to health services, and where only 57.3% of the population have smartphones compared to 82.9% in urban areas. A key reason as explained by our interviewees is the high cost of a mobile device.

It is essential to consider this factor in the targeting of public policies. When it comes to digital monitoring, the poorest sectors of the population are ultimately not affected by policies that depend on this technology because they do not have access to the federal government application. In addition, they have historically occupied a position of invisibility in the provision of public services, which leads to a scenario of exclusion and reinforcement of vulnerabilities. Digital contact tracing efficiency in Brazil is severely limited by the country's "digital divide".

On the other hand, the low dissemination of the app as an essential means of control and policy, coupled with low adherence, also contributed to its ineffectiveness. Coronavírus-SUS had been downloaded 1.99 million times in the App Store and 8.7 million times in the Google Play Store by December 2020. This represents 5% of the population. Studies indicate that at least 60% of the population need to use the app for it to be effective.

Widespread use of the app could neither be observed among people with access to smartphones, arguably given the app's lack of dissemination and its uncoupling from

other public policies, nor in the poorer population, due especially to their lack of access to information and communications technology (ICT) and their historical invisibility, current exclusion and the lack of publicity from the Ministry of Health.

INTEGRATION

Even though the healthcare experts we interviewed believe that contact tracing can be effective if properly utilized and combined with other tools, the limited number of downloads and negligible use compromise its effectiveness. There is also no official data to contradict these impressions. Recognizing the importance of preserving privacy, one of the experts interviewed pointed out that software-based contact tracing in its current form cannot replace human contact tracing. After identification, the contacts of the patient must be actively sought out and followed up by the epidemiological surveillance or health team. Therefore, the potential effectiveness of the contact tracing app depends on the notified user's willingness to adopt the measures indicated or on whether they sought out health facilities.

DATA-DRIVEN PUBLIC-PRIVATE PARTNERSHIPS

The pandemic has posed serious challenges for public managers who need to plan quick and effective strategies to combat the disease and its effects. Some of these actions were set in motion by mobilizing public resources but others mobilized capacities that go beyond those offered by the public sector, through partnership initiatives between governments and the private sector. This has occurred in several cities in Brazil, especially with regard to technologies that make it possible to monitor the population's adherence to quarantine and social distancing measures.

HEAT MAPS

One of these partnerships, central to the debate on actions against the pandemic, is the São Paulo Intelligent Monitoring Information System (SIMI-SP), whose operation is based on geolocation data for monitoring social isolation in the state. The partnership is based on an agreement between the São Paulo State Government and four telephone companies. The operating model is based on data from the service's consumers captured by antennas which enables managers to identify the percentage of the population who are self-isolating and areas where people are congregating, in order to issue guidelines via SMS and perform reverse analyses for policy decision-making. The information is presented through heat maps and indicates movement trends and the effectiveness of quarantine measures.

The technical cooperation agreement provides for the data to be made available to the public authorities through a platform with an individualized access key and password for each authorized representative. The data

provided are statistical and volumetric and are therefore made available in an anonymous and aggregated form using heat maps. This has led the state government to announce the absence of privacy risks due to the supposed inexistence of personal data. However, in the case of data sharing, it is fundamental to follow the precautions in the legislation and in best practices, as well as evaluate the specific purposes and forms of data collection, given the ongoing risk of rights infringement.

Another problem arises from the lack of publicity about the terms of the partnership. The government's initial information about SIMI was limited to reporting a partnership with telecommunication companies to measure adherence to quarantine measures, based on aggregated and anonymized information. Although these are actions taken with a presumption of legitimacy, manifested by the necessary compliance with the law, the constitutional markers that govern public administration must be observed to ensure no misinterpretation. For this reason, uncertainties and lack of clarification on the terms of the agreement have meant that this process has been challenged and criticized, especially among specialists.

THE DASHBOARD OF THE SOCIAL DISTANCING INDEX

In addition to the heat maps, partnerships were forged in states and municipalities with a startup, "In Loco", which provides free dashboard access to the social isolation rates in the largest Brazilian cities. At least eleven Brazilian states and municipalities – including Sergipe, Espírito Santo, Ceará, Goiás, Pará, Macapá, Rondônia, Porto Alegre, Niterói, Maringá and Recife – joined the partnership, which was formalized primarily through a donation and, therefore, required no cost to local government.

The dashboard presents daily updated information on the percentage of the population present in their respective neighborhoods, allowing targeted administrative contingency decisions. The data used to produce the isolation index are geolocation data, which, according to the startup, use a technology 30 times more precise than GPS. The data collected are network signals (GPS, Wi-Fi and Bluetooth) and device signals, resulting from the integration of an SDK module widely used in private apps in Brazil (the apps are required to inform the public about such integration in their privacy policies). The technology points out whether the smartphone remained for a long period in the same place or not and sends the location data and the smartphone's advertising ID number to In Loco's servers, without directly identifying the user.

The agreement establishes that these data are available only in aggregate form to preserve privacy. Considering that the explicit objective of In Loco is to contribute to the fight against the pandemic and to assist the authorities in directing public safety, communication and health resources, the isolation indexes are publicly available in order "to help raise public awareness about the pandemic and what they can do to keep themselves safe, using all means of communication available."

BELOW IS A LIST OF THE MAIN APPLICATIONS THAT USE THE SDK MODULE, ACCORDING TO A SURVEY CONDUCTED IN MAY 2020:

APPS AND PLATFORMS

NUMBER OF INSTALLS

(May 22, 2020)

89 FM A RÁDIO ROCK

500,000+

play store link: 89 FM THE RADIO ROCK - APPS ON GOOGLE PLAY

Their privacy policy explains the SDK module's usage: https://www.radiorock.com.br/politica/mobile/
In this policy, they no longer do: Termo de Privacidade

ADAMA

500+

play store link: ADAMA

AVALIAÇÃO IN LOCO (INEP'S APP)

5,000+

play store link: AVALIAÇÃO IN LOCO - APPS ON GOOGLE PLAY

BOTICÁRIO (RESELLER'S APP)

1,000,000+

play store link: REVENDEDOR O BOTICÁRIO - APPS ON GOOGLE PLAY

BUSCAPÉ

10,000,000+

play store link: BUSCAPÉ: OFERTAS, DESCONTOS E PROMOÇÕES - APPS ON GOOGLE PLAY

CADÉ O ÔNIBUS

1,000,000+

play store link: CADÊ O ÔNIBUS? - APPS ON GOOGLE PLAY

CHEFSCLUB

100,000+

play store link: HTTPS://PLAY.GOOGLE.COM/STORE/APPS/DETAILS?ID=BR.COM.CHEFSCLUB.APP

CITTAMOBI

5,000,000+

play store link: CITTAMOBI - ROTAS & HORÁRIOS DE ÔNIBUS - APPS ON GOOGLE PLAY CITTAMOBI ACESSIBILIDADE

10,000+

CONECTA IMOBI ACADEMY

play store link: POLÍTICA DE PRIVACIDADE PLATAFORMA CONECTA IMOBI ACADEMY

CORRETOR BRASIL

play store link: POLÍTICA DE PRIVACIDADE

CUIDAÍ

play store link: POLÍTICA DE PRIVACIDADE

DIETA E SAÚDE

5,000,000+

play store link: DIET AND HEALTH - LOSE WEIGHT

LETRAS MUS play store link: LETRAS.MUS.BR - APPS ON GOOGLE PLAY	10,000,000+
MÉLIUZ play store link: MÉLIUZ: CUPONS E CASHBACK - APPS ON GOOGLE PLAY	1,000,000+
MEU PAG! play store link: HTTPS://PLAY.GOOGLE.COM/STORE/APPS/DETAILS?ID=BR.COM.MEUPAG	5,000,000+
PALCO MP3 play store link: PALCO MP3 - APPS ON GOOGLE PLAY	100,000,000+
PEIXE URBANO play store link: PEIXE URBANO - CUPONS, DESCONTOS E OFERTAS - APPS ON GOOGLE PLAY PEIXE URBANO - APP DE PARCEIROS	10,000,000+ 50,000+
PLATAFORMA VOLUNTÁRIOS ONLINE (RECIFE) play store link: POLÍTICAS DE PRIVACIDADE	
RENTME play store link: HTTPS://PLAY.GOOGLE.COM/STORE/APPS/DETAILS?ID=GLOBAIS.COM.RENTME&HL=EN_US&GL=US PRIVACY POLICY (IN CACHE)	10,000+
SUA MÚSICA play store link: SUA MÚSICA	10,000,000+
TUDO GOSTOSO play store link: TASTELY	10,000,000+
VERDINHO (APP DE ÔNIBUS) play store link: VERDINHO PRIVACY POLICY (IN CACHE)	10,000+
VICONSUS play store link: VICONSUS	10,000+

TO WHAT END? AGGREGATED LOCATION DATA FROM A PUBLIC HEALTH PERSPECTIVE

While technological measures can raise concerns about rights violations, their value in public health cannot be denied. In this case, technology can provide telemedicine services, raise awareness, inform the public, and monitor movement, infections, and gatherings of people. Thus, control of the pandemic may be improved by rapidly identifying and isolating infected individuals, and by avoiding large gatherings.

Aggregate mobility data obtained from smartphones may be useful to target areas with less adherence to quarantine measures, in order to interrupt disease transmission and increase the effectiveness of other public policies such as travel restrictions. Identifying movement and gatherings of people based on these technologies also enables the implementation of targeted strategies for public communication and education, based on firm and realistic messaging about the situation that reduces the effects of misinformation and inspires citizen commitment to isolate (Budd et al., 2020).

Despite these measures' potential efficiency, their effectiveness depends on other measures, such as human contact tracing, monitoring by means of visits from community health agents, or security agents if provided for in regulations.

In Brazil, the data generated by such tools is being used mainly in the effort to communicate with the public about why restrictions are justified, and in informing them about the quarantine measures, whether by sending SMS, using cars with loudspeakers, or holding press conferences.

ALTERNATIVE MEASURES: LOCKDOWNS/QUARANTINE

Measures to restrict movement have not been implemented uniformly or coordinated across Brazil. Sanitary actions were limited to border control and quarantine with different degrees of restriction, at different times and with varying impacts, including recommendations on social distancing and suspending non-essential activities. The decentralization of these measures hinders their comprehensive mapping and their rigor, validity period, and effectiveness (CONECTAS, CEPEDISA, 2021).

At the federal level, in keeping with its constant minimization of the risks and severity of the disease, the federal government limited itself to imposing rules on border control and controlling the entry of foreigners into the country, which ended up having an unequal impact on Latin American immigrants – especially Venezuelans – and reinforced their vulnerability. This will be explored in the next pillar.

Social distancing measures were asymmetrically determined in Brazil. This is related both to the federal governmental structure and to the spread of the disease. At the national level, internal divisions between the President and the Ministry of Health and concerns related to the economic impacts of social distancing measures undermined isolation rules. In the first months of the pandemic, the federal government introduced social

distancing for people over sixty (Silva et al., 2020). The adoption of other social isolation measures has been mainly the responsibility of state and municipal governments.

In March, President Bolsonaro indicated his inclination to relax the lockdown through the campaign "Brazil cannot stop," banned by the Federal Court of Rio de Janeiro a few days later. The first federal entity to impose restrictions on movement was the Federal District, which in early March suspended events with an audience of over 50 people as well as educational activities,⁴ a practice followed by practically all states later in March (Pereira et al., 2020). Furthermore, states such as Rio de Janeiro,⁵ São Paulo,⁶ Ceará⁷ and Minas Gerais⁸ have implemented social distancing measures by suspending collective activities, closing schools, suspending prison visits, etc.

As a rule, all levels of public administration issued decrees providing for lockdowns and stipulating which activities and services would be essential, i.e., activities that could remain in operation even during the pandemic. There was, however, no standard for defining essential activities, despite Federal Decree 10.282/2020 that regulated them. In Belém, for example, the work of housekeepers was considered an essential service, under the justification that "a doctor, for example, needs someone to help at home." This uncertainty has done much to weaken social distancing and cause confusion in the general public. Additionally, President Jair Bolsonaro was against the publication of decrees on essential activities at the state and municipal levels. He issued Provisional Measure No. 926/2020 in February, which gave him the authority to define which essential services could not be restricted by isolation and quarantine measures.

Similarly, lockdowns in the states and municipalities have caused discord between the federal government and other levels of public administration. While President Jair Bolsonaro defended a partial resumption of economic activities and questioned state and municipal decrees that implemented social isolation, governors and mayors intensified social distancing measures due to spikes in the number of Covid-19 cases. The imbroglio regarding who had the power to take action to deal with the pandemic was brought to the Judiciary. In April, the Federal Supreme Court, in its ruling No. 6341 on the Direct Action of Unconstitutionality (ADI), questioned the validity of Provisional Measure 926/2020¹⁰ and recognized the concurrent jurisdiction of the states, municipalities, Federal District and Union in dealing with Covid-19.

Following the Supreme Court's decision and faced with the continuous increase in cases, governors and

⁴ District Decree No. 40.509, issued on March 12, 2020 by the Federal District Government. Available at: http://www.sinj.df.gov.br/ SINJ/Norma/ad0fae78af5f4e50b46c7357b7ee8597/Decreto_40509_11_03_2020.html.

⁵ Decree No. 47.006, issued on March 27, 2020 by the Rio de Janeiro State Government. Available at: https://pge.rj.gov.br/comum/code/MostrarArquivo.php?C=MTAyNDk%2C.

⁶ Decree No. 64.881, issued on March 22, 2020 by the São Paulo State Government. Available at: http://dobuscadireta.imprensaoficial.com.br/default.aspx?DataPublicacao=20200323&Caderno=DOE-l&NumeroPagina=1.

⁷ Decree No. 33.519, issued on March 19, 2020 by the Ceará State Government. Available at: https://www.cge.ce.gov.br/wp-content/uploads/sites/20/2020/03/Decreto-n.-33.519-de-19-de-mar%C3%A7o-de-2020.-Intensifica-as-medidas-para-enfrentamento-da-in-fec%C3%A7%C3%A3o-humana-pelo-novo-coronavirus.pdf.

⁸ Decree No. 47.886, issued on March 15, 2020 by the Minas Gerais State Government. Available at: https://www.almg.gov.br/consulte/legislacao/completa/completa.html?tipo=DEC&num=47886&comp=&ano=2020.

⁹ Azevedo, Gabriela; Sóter, Gil; and Rezende, Thaís. "Lockdown no Pará tem serviço doméstico como 'essencial', contrariando governo federal e MPT." G1. May 07, 2020. Available at: https://g1.globo.com/pa/para/noticia/2020/05/07/lockdown-no-para-tem-servi-co-domestico-como-essencial-contrariando-governo-federal-e-mpt.ghtml.

¹⁰ The Provisional Measure (MP) 929/2020 established the procedures for the acquisition of goods, services and supplies required to deal with the public health emergency of international importance due to Covid-19. Article 3° § 9, challenged in ADI 6341, establishes that it is the President of the Republic's responsibility to define which are the essential services that cannot be restricted in isolation and quarantine measures. Available at: https://www.in.gov.br/web/dou/-/medida-provisoria-n-929-de-25-de-marco-de-2020-249676431.

mayors began to adopt new social distancing measures, in addition to quarantine, such as the mandatory use of masks, lockdown, and fewer vehicles allowed on the streets. At the federal level, the conflict between the Ministry of Health and the Presidential Palace, which led to the health minister being replaced three times in three months, created paralysis in the Ministry of Health, which was unable to coordinate actions to combat the pandemic or issue effective social distancing guidelines (Pereira et al., 2020). In May, at the peak of the first Covid-19 wave in Brazil, ¹¹ the National Health Council issued a recommendation ¹² to the Ministry of Health, governors, mayors and health secretaries to implement measures to ensure social distancing by 60% of the population and lockdowns in municipalities with critical occupancy rates for hospital beds.

In São Paulo, Mayor Bruno Covas expanded vehicle restrictions to increase the rate of adherence to isolation measures. ¹⁵ The new rules, significantly more restrictive than the city's traditional ones, established alternating days for the use of vehicles based on whether they have odd or even numbered license plates. However, the decree did not have the expected effect; there was no increase in the isolation index, and there was a strong negative reaction from the public. Ten days later, the decree was revoked.

Maranhão was the first Brazilian state to decree a lockdown, which was approved by the Judiciary of Maranhão after a Fiocruz study indicated that, at the time, the state had the highest rate of increase in the total number of deaths. ¹⁴ The lockdown was implemented in four of the state's municipalities and lasted 12 days. Other states and municipalities also implemented a lockdown, among them the states of Pará and Amapá; and at the municipal level, cities such as Macapá, Fortaleza and Niterói. In order to enforce the measures, states and municipalities established fines for non-compliance. Also, a provision in art. 268 of the criminal code sanctions the violation of a sanitary measure determined by the public authorities to prevent disease. However, the contradictory decisions taken by federal and state authorities and Ordinance 356/2020 of the Ministry of Health, which requires free and informed consent from the patient before s/he can be placed in isolation, weakened the application of sanctions for non-compliance.

The use of masks in public spaces became mandatory in at least 25 states and the Federal District.¹⁵ In São Paulo,¹⁶ for example, masks must be worn in spaces with open access to the public and inside public establishments and offices. Despite the lack of coordination and enforcement by federal authorities, studies indicate that most Brazilian states had implemented most of the social distancing measures before the tenth case of Covid-19 was identified and before the first death caused by the disease (Silva et al., 2020).

¹¹ Mões, Malu. "Pico em maio, repique em julho: as datas reais da pandemia no Brasil." Poder360. December 5, 2020. Available at: https://www.poder360.com.br/coronavirus/pico-em-maio-repique-em-julho-as-datas-reais-da-pandemia-no-brasil/.

¹² Recommendation No. 6, from May 11, 2020. Available at: http://conselho.saude.gov.br/recomendacoes-cns/1163-recomendac-a-o-n-036-de-11-de-maio-de-2020.

¹³ Municipal Decree No. 59.403, issued on May 7, 2020 by the city of São Paulo. Available at: http://legislacao.prefeitura.sp.gov.br/leis/decreto-59444-de-17-de-maio-de-2020.

¹⁴ Decree No. 35.784, issued on May 3, 2020 by the Maranhão State Government. Available at: https://www.ma.gov.br/agenciadeno-ticias/wp-content/uploads/2020/05/DECRETO-35.784-DE-3-DE-MAIO-DE-2020.pdf.;Case No. 0813507-41.2020.8.10.0001, TJMA; Fiorruz. "Ritmo do crescimento de mortes por Covid-19 aumenta em estados como MA, RS e SE." April 30, 2020. Available at: https://portal.fiocruz.br/noticia/ritmo-do-crescimento-de-mortes-por-covid-19-aumenta-em-estados-como-ma-rs-e-se.

¹⁵ UOL. "Após decretos, veja em quais cidades o uso de máscara é obrigatório." May 17, 2020. Available at: https://noticias.uol.com.br/saude/ultimas-noticias/redacao/2020/04/17/apos-decretos-veja-em-quais-cidades-o-uso-de-mascara-e-obrigatorio.htm.

¹⁶ Decree No. 64.959, issued on May 4, 2020 by the São Paulo State Government. Available at: https://www.al.sp.gov.br/norma/?id=193701.

PILAR 2: CONTACT TRACING APPS AND FUNCTION CREEP: INCREASED SOCIAL CONTROL?

CORONAVÍRUS-SUS: PRIVACY, TRANSPARENCY AND INFORMATION SECURITY: ASSESSING RISKS

The use of contact tracing applications raises questions about security, privacy and ethics, since their operation is sometimes based on the processing of sensitive data whose effect can compromise civil liberties such as individual autonomy, equality and data protection. Such issues must be appropriately addressed because they affect the current situation and future online public services models, which increasingly rely on the assimilation of technologies and the use of personal data. In this context, the implementation of these technologies must consider proportionality, necessity and other constitutionally protected principles, including the ones provided by data protection regulations.

The European Commission has compiled guidelines for the implementation of such technology through the "EU toolbox for contact tracing apps." According to the document, to preserve privacy as much as possible, contact tracing must comply with European data protection legislation, be installed voluntarily, and favor the use of proximity technology via Bluetooth.

Translating these recommendations to Brazil, Coronavírus-SUS complies with most of them - a good indication in terms of the protection of privacy. Besides using the proximity solution via Bluetooth, which enables data anonymization, Coronavírus-SUS is not automatically installed. It needs to be downloaded from the Google Play Store or Apple Store to be activated. In terms of legal compliance, the app claims to comply with the Internet Civil Framework and the General Data Protection Law (LGPD) which has been in force since September 2020.

Revoking the postponement of the LGPD took several data processing experts by surprise. In Brazil's private sector, debate about this law has been going on for several years and became more widespread in 2020, involving debates about the legal basis for data treatment, especially consent and the execution of contracts provided for in art. 7 of the LGPD. Less advanced, however, is the discussion about how data are used when executing public policies and the implications of this for citizens and the public sector.

The requirement that data processed in public policies must comply with the LGPD entails planning to establish a functional data governance framework that preserves the efficiency of the services. Based on the LGPD, the data subjects, i.e., in this case, the users of Coronavírus-SUS, are supposed to have greater security and autonomy over their data, since requirements such as adequacy, necessity, purpose and transparency must be followed for appropriate data treatment.

The strict observance of these principles is even more indispensable when the collection of citizens' location data by state authorities is involved. On the one hand, this is due to users' limited bargaining power concerning the terms of use of such services, especially in public emergencies. On the other hand, location data can reveal important individual characteristics, behaviors, and conditions. When cross-checked against other public

administration databases, it can provide information such as an individual's racial and ethnic identity, easily enabling the app's operator to identify the data subject. This means the data can be deployed as an instrument of control or surveillance by the state (Sadowski, 2019).

We have evaluated Coronavírus-SUS according to its categories of consent, necessity, transparency and security, all of them provided for by Brazilian law and often presented in good practice standards. Through these categories, it should be feasible to assess important aspects of data protection offered by the technology and the degree of control the data subject has over the data. We have analyzed the app's privacy policy and, using Berkeley University's Lumen Privacy Monitor, its data flow, aiming to assess its compliance with the principles mentioned above. Below, we summarize our main findings.

Regarding consent, the government, as the provider of the application, must collect free, express and informed consent from the data subject for all its data processing activities, according to art. 7, VI, VII, VIII and IX of the Internet Civil Framework and art. 5, XII of the LGPD. This means that the consent cannot be subject to reprisals or constraints, i.e., that the authorization granted by the subject for the processing of their data is not obligatory (and therefore revocable), and that it is explicit and specific to each and every objective of the data collection and processing.

Compliance with the requirements of "free, express and informed" consent and the provision of "clear and accurate" information is often achieved through a clear and transparent privacy policy. When it was still an essentially informational application, Coronavírus-SUS did not include this type of policy, only informing people of the permissions it requested at the Play Store. When it became a contact tracing application, it included a privacy policy where consent was requested before using the functionalities ensuring that the user gave their express authorization for their personal data to be used. However, the information presented regarding data treatment is ambiguous, limiting the full validity of the user's consent. More concretely, the privacy policy provides that only data related to the "mobile phone identification key" will be processed and no other personal data will be collected. The app provides the user with a button to state that they have tested positive for Covid-19, which can only be completed by providing a unique number issued by the Ministry of Health.

Therefore, at least two different data points are being treated by the app: a unique number related to the smartphone and a unique number related to a positive coronavirus test. If one considers that personal data, according to the LGPD, is any information capable of identifying an individual – even if only potentially, e.g., through reverse engineering, it is easy to conclude that the app processes personal data (art. 5, I, LGPD). Furthermore, if a unique number is related to the results of a Covid-19 test, i.e., information related to one's health, it can also be considered sensitive data (art. 5, II, LGPD). Thus, identifying data collected by the app, even if not associated with the user's name and surname, can identify the data subjects if an effort is made to do so.

Confusingly, however, and even though the policy's wording appears geared towards collecting consent and complying with the LGPD, it also states that the data collected are not personal, which would be – still according to the document – a reason not to consider them sensitive. This reveals a lack of clarity in communicating to the user how their data will be used, even if the data collected do not directly identify them.

There is also a contradiction in stating that the phone's identifying key is not considered sensitive data since, the application uses numbers generated by the Ministry of Health to validate positive Covid-19 tests. Such data must be crossed with National Health Data Network records (a public database of health data aimed at easing

data sharing between public health agencies), which are by their nature sensitive personal data. There is a lack of clarity in the policy regarding these data crosses or data flow to other servers, although our analyses with the Lumen Privacy Monitor application have detected data flow from the app to hosting services operated by amazonaws.com. According to the policy, all data processing is carried out only by the Ministry of Health, which leaves Amazon's role unclear to the user.

Free, express and informed consent is fundamental, especially when it comes to sensitive data. However, what is observed in the application is confusion about the type of treatment being given and which data are being used, resulting in possible obstacles to validating express and informed consent. Also, there is no information about updates to the privacy policy and the requirement or not of a new consent if one were to process the data for other purposes.

On the other hand, the application asserts repeatedly that each permission to use functionalities is in line with international good practices of personal data processing. Specific permission is collected for both the exposure notification function and the usage of location data (which, according to the app's policy, is not collected), allowing for consent in this particular case that is not linked to other permissions. Although the lack of clarification on the collection of personal and sensitive data, as well as the sharing of data with other entities, are the points detected in the diagnosis of the Ministry of Health's application, other aspects of the data processing are informed, such as the final term of data retention and the right to revoke consent via e-mail.

Even though good practices are used to collect lawful consent in some situations, there is little clarity regarding Amazon's role and the exact extent of the data processing. Therefore, the consent collected is not completely free, express and informed. As we shall see later when discussing the app's safety, we have also detected unencrypted traffic flows between it and Amazon's servers, which are not discussed in its policies. Such information deficits contribute to a "vice of consent" since they do not provide the user with the autonomy to make decisions about the use of their data.

The lack of clear information on personal data processing, especially sensitive data, weakens the legal basis for consent and the principle of transparency. The obligation of transparency is a corollary of the authorization for data processing granted by LGPD. It is provided for in all data collection regulations, namely art. 6, VI of LGPD and art. 7, XI of the Internet Civil Framework. In the case of personal data use by the government (i.e., in the provision of contact tracing services), one must also comply with art. 37, caput, of the Federal Constitution, which establishes transparency as a general rule in public management.

In any case, compatibility with the data protection framework goes beyond a mere analysis of transparency and attention to the possibility of consent. It is an essential condition of compliance with privacy regulations. Understanding the purpose of each permission allows the data subject to have more autonomy and control over their data and preserves their expectation about their treatment, resulting in limitations to the possibility of data abuse through unreasonable and undue interference by the government.

The application informs users that the data controller can communicate with them to report that they have been in contact with an infected person. It also enables the controller to contact users who have been in the vicinity of a person identified as having Covid-19. According to the LGPD's limitation principle, once specific purposes for the data processing have been consented to, the controller may not use it for other underlying purposes in this or any other context. It follows that the permissions obtained must be linked to data that allow the identification of

users, since they acquire permission for exposure notification using Bluetooth and for activation of the device's location settings, even if the application allegedly does not use, save or share this information.

The right to privacy within Coronavírus-SUS requires that the data controller must clarify which protection protocols are in place, such as encryption, and ensure that there is a guarantee of data anonymization that will preserve personal data from irregular treatment by unauthorized third parties. The app's policy appears to demonstrate compliance by informing that "the data saved on your smartphone and the connections to the server are encrypted." However, a large flow of unencrypted information between the application, the Ministry of Health domain and an Amazon domain was identified by the Lumen application – specifically when using the app's positive Covid-19 test submission feature.

Another problem related to the security of contact tracing applications is the pseudonymization of data. Although this expedient tends to maintain the anonymity of the data subjects through random and provisional identification keys, the location data of individuals may be so specific that they can reveal one's habits, and if crossed with other sensitive data, may represent an overall risk to privacy and individual freedoms (Alanoca et al., 2020).

Despite these apparent security flaws, it is important to note that the app adopts an open-source model, allowing access and auditing by any individual, and favors social control. This aspect maximizes the information security capacity and corroborates the national application's conformity with good international practices.

DATA-DRIVEN PUBLIC-PRIVATE PARTNERSHIPS PRIVACY AND TRANSPARENCY CONCERNS

The data and technology transfer involved in public-private partnerships raises concerns about rights. Firstly, data processing must comply with the principles and standards established in data protection regulations. Secondly, in the case of agreements and contracts with public authorities, compliance with public administration principles is required.

Art. 37 of the Federal Constitution aims at preserving transparency in the execution of administrative acts, which means public administration and authorities must conduct their contracting procedures and carry out agreements through open methods, enabling citizens to be informed. This was one of the sensitive aspects of the public-private partnership carried out by the São Paulo State Government – the lack of transparency.

While the terms of the agreements signed between public authorities and In Loco provided for their publication in the official gazettes of the respective federative units and can easily be accessed by internet search tools (given the public availability In Loco's privacy policy), the agreement signed for the public-private partnership was originally announced by the state government with little information.

In addition to the fact that the agreement was originally unknown to citizens because it was not published in the official gazette, the government failed to observe the transparency inscribed in the Constitution, because it has not informed the public how to access the data, nor the period of validity or the affected rights. Despite

the formal signing of the agreement on April 14, 2020, the enactment of an appropriate legal instrument for the SIMI only occurred on May 5 through Decree No. 64.963/2020. This indicates a possible use of technology – and therefore data – without transparency about the partnership and the information system utilized. This has clouded the partnership with legal insecurity and prevented citizens from exerting real control over their data and the public partnership itself. The non-disclosure of the agreement resulted in doubt as to the types of data collected, leading to the judicialization of the conflict, which culminated in the agreement being disclosed.

The agreement terms indicate how anonymized data, which must be free of information capable of identifying the data subject, is processed. It also provides information on the app's security and limits the processing's purposes to the fight against the pandemic. The public entity which has access to the data platform must maintain the secrecy of all information, which includes confidentiality proviso and obligation of responsibility in the event of improper use of information. The document also provides for the agreement's termination in the case of any security incident or in the event of data processing for purposes other than the ones determined.

The partnerships with In Loco to provide the isolation index dashboard, on the other hand, seem to be at least textually more compatible with the current legal framework as the agreement also mention the LGPD and the Civil Rights Framework for the Internet. It declares respect for fundamental rights and freedoms and expressly requires that data not be used for discriminatory purposes in compliance with the principle of "non-discrimination" of art. 6, IX, LGPD.

The company provides clear information on data processing, the agents responsible and its purpose, following the principle of transparency prescribed in art. 6, V, LGPD. The agreements provide information on the specific purpose of the shared data, namely, to confront the state of emergency as a result of Covid-19, and establishes that in the event of failure to comply, the partnership will be terminated.

The company's privacy policy states that In Loco is not interested in identifying the user. To prevent this, the company declares that it uses the most recommended international standards in data protection and observes the strategy of "privacy by design"¹⁷, as well as not identifying associated e-mail accounts or telephone number and civil identification (name, CPF etc.). On the other hand, using the pandemic to boost data collection for government entities through an integration with private applications ("the goodwill apps"¹⁸) is questionable.

THE JUDICIAL MODEL: EPISODIC AND REACTIVE OVERSIGHT

The São Paulo State Government's agreement to develop the Information and Intelligent Monitoring System (SIMI-SP) generated mistrust, manifested in the filing of writs and popular actions by citizens who feared the violation of their rights. The actions aimed at suspending SIMI and condemning the governor for administrative improbity, on the grounds that there had been a threat of intrusion and a violation of the right to liberty, both constitutionally protected. In addition the agreement lacked transparency and was not legally formalized until later when it was approved by decree.

¹⁷ The term means that the data protection principles and structures that preserve it are integrated into the technology when created and right from the start.

¹⁸ This is the way the startup In Loco refers to the technology used for public interest in this case.

The agreement was formalized months before the LGPD took effect and gave rise to uncertainties. The absence of a regulatory national data protection authority, the scant jurisprudence on data protection, and the pandemic, led to the government, public prosecutors, and judges of the State of Sao Paulo being reluctant to discuss the agreement.

This, therefore, was an important case to define how personal data should be processed and what the limitations of data processing would be. In these cases, the Court recognized the Intelligent Monitoring System's legitimacy, based on the understanding that the system does not violate a citizen's privacy. This understanding was reached by evaluating the terms of the agreement and the Court ruled that the tool does not pose any risks to privacy since the citizen's travel trajectories are not analyzed individually.

The legal counsel of the Ministry of Science, Technology, Innovation and Communications (MCTIC) reinforced the opinion that the agreement between the government and telecommunication companies does not process personal data in the case of government actions involving geolocation data collection to combat Covid-19. Under the argument of the supremacy of the public interest over the private, given the urgent and immediate public interest in fighting the pandemic, the MCTIC legal counsel's opinion reinforced the argument of legitimacy of the use of data from users of telecommunications services. It also raised the possibility of using the data in public health studies, favoring anonymization, in accordance with the LGPD. Another argument raised in the opinion was the Quarantine Law, specifically art. 6, which allows data sharing with the sole purpose of avoiding the spread of Covid-19, and responds to concerns about excessive restrictions on freedoms and rights arising from this data collection, as well as from actions to reinforce isolation. In a ruling on one of the filed writs, it was argued that there is indeed no personal data processing in the public-private partnership, as it only deals with anonymized data.

ALTERNATIVE MEASURES: BORDER CONTROLS

Several countries, including Brazil, have adopted border control strategies to control the spread of Covid-19. The first action was the enactment of Ordinance No. 120,¹⁹ which restricted the entry of people from Venezuela into the country. The rule made by the Casa Civil, a body directly linked to the head of the executive branch, is based on a recommendation of Anvisa, the Brazilian health regulatory agency. However, the ordinance did not come accompanied by any epidemiological study that would justify the restriction specifically aimed at Venezuela.²⁰

In the days that followed, the federal government expanded the number of countries whose borders were temporarily closed, restricting the entry of people from Argentina, Bolivia, Colombia, French Guiana, Paraguay, Peru and Suriname.²¹ The only Latin American country whose border with Brazil remained open was Uruguay. According to these ordinances, illegal entry into the country could lead to civil, administrative and criminal liability, immediate deportation and disqualification of asylum requests.²²

¹⁹ Ordinance No. 120 of March 17, 2020. https://www.in.gov.br/web/dou/-/portaria-n-120-de-17-de-marco-de-2020-248564454.

²⁰ Anvisa published the Technical Note No. 1/2020/SEI/GADIP-DP/ANVISA. https://www20.anvisa.gov.br/segurancadopaciente/index.php/alertas/category/notas-tecnicas.

²¹ Portaria N° 125, March 19, 2020. https://www.in.gov.br/en/web/dou/-/portaria-n-125-de-19-de-marco-de-2020-248881224.

²² In March, a few days after the publication of Ordinance No. 125, the federal government published Ordinance No. 133 on March 23, 2020, which expanded the number of countries where there were restrictions on travel. According to the new rule, people from China, the European Union, the United Kingdom, Japan and other countries were temporarily prevented from entering Brazil. https://www.in.gov.br/en/web/dou/-/portaria-n-133-de-23-de-marco-de-2020-249317436.

Considering that Brazil is a country of destination and transit for immigrants and refugees, especially from Venezuela (Coury et al., 2018), the federal government's ordinances raised concerns in civil society about the restriction's discriminatory actions against Venezuela since similar measures have not been registered against any other country in the region. There has not been any thorough study justifying the need for differential treatment of Venezuelan immigrants. The discriminatory treatment is worrying, especially if we consider that Brazil recognizes Venezuelans' refugee status by acknowledging serious and widespread human rights violations in the country.²³

It is worth noting that the ordinances issued in March, aimed at Latin American countries, restricted the entry of immigrants and provided for immediate deportation and loss of the right of asylum. Immediate deportation, without the right to petition, violates the Migration Law (Law No. 13.445/2017), highlights the weakened human rights situation created by the federal government during the pandemic. According to the Migration Law, deportation is an administrative procedure that must respect the principle of broad defense and due legal process (art. 50 and art. 51).

The disqualification of the request for asylum also violates national law and international conventions. The 1951 Refugee Convention and Law No. 9474/1997 establish that irregular entry into the national territory does not constitute an impediment to requesting asylum from the authorities (art. 8). Therefore, even if the entry into Brazil is considered irregular due to the closing of borders, such irregularity may not disqualify an asylum request.

As the months passed, the federal government reorganized the ordinances on border control. In June, a new ordinance was issued that prohibited the entry of foreigners according to entry routes and no longer based on their countries of origin. According to the new rules, which needed to be renewed monthly, the entry of foreigners by land, air, or water transportation was prohibited (art. 2). However, this ordinance allowed for exceptions for foreigners with visas for study, work and sports activities (art. 7), and for migrants' entry into the country. This last provision, however, was not applicable to people coming from Venezuela. In July, Interministerial Ordinance No. 125 reopened the air borders for tourists. The land and water borders, mostly used by asylum seekers, remained closed, and sanctions in the form of immediate deportation and disqualification from requesting asylum were maintained. These new ordinances showed that the flexibilization of the rules of entry was only intended to serve economic interests, and discrimination specifically targeting Venezuelan immigrants had no technical or epidemiological support.

The measures adopted by the federal government have disproportionately impacted those seeking asylum. The state of Acre has registered immediate deportation requests for immigrants based on the Interministerial Ordinance. In August, 18 immigrants – 12 of them from Venezuela – entered Brazilian territory on foot along the border between Acre and Peru. The group was threatened with deportation by the Federal Police and trapped on a bridge at the border. The Federal Public Defender's Office, Federal Public Prosecutor's Office, Associação Direitos Humanos em Rede (Conectas Human Rights) and Caritas Arquidiocesana de São Paulo filed a collective public civil action requesting the deportation order's suspension. ²⁶ In a preliminary decision, the Federal Court granted

^{23 &}quot;Nota Técnica da Sociedade Civil sobre Portarias nº 120 e 125 referentes à restrição excepcional e temporária de entrada no Brasil de pessoas oriundas de países fronteiriços, exceto Uruguai." https://www.conectas.org/wp/wp-content/uploads/2020/03/No-ta-Te%CC%81cnica-da-Sociedade-Civil_fechamento-de-fronteira_COVID19_.pdf.

²⁴ Ordinance No. 340 of June 30, 2020. https://www.in.gov.br/web/dou/-/portaria-n-340-de-30-de-junho-de-2020-264247695?inher-itRedirect=true&redirect=%2Fweb%2Fguest%2Fsearch%3FqSearch%3Drestri%25C3%25A7%25C3%25B5es%2520para%2520entrada%2520de%2520estrangeiros.

²⁵ Ordinance CC-PR/MJSP/MINFRA/MS No. 1 of June 29, 2020. https://www.in.gov.br/web/dou/-/portaria-cc-pr/mjsp/minfra/ms-n-1-de-29-de-julho-de-2020-269235614

²⁶ Nascimento, Aline. "No AC, ação civil pública coletiva pede suspensão de deportação de imigrantes que entram pela fronteira." G1. August 19, 2020. https://g1.globo.com/ac/acre/noticia/2020/08/19/no-ac-acao-civil-publica-coletiva-pede-suspensao-de-deport-acao-de-imigrantes-que-entram-pela-fronteira.ghtml.

the suspension, based on the argument that the measure would result in a severe risk to the life, health and integrity of the refugees.²⁷ Even with this decision, a new ordinance published in August²⁸ maintained the same prohibitions on crossing land borders, with the provision for immediate deportation and disqualification from requesting asylum.

The ordinances issued during the health emergency differ from the country's practices in the last decade regarding migration and the reception of refugees. With the worsening of Venezuela's political situation and the increase in the number of immigrants, the Brazilian state created Operation Reception in 2018, commanded by the Armed Forces, in the northern region of the country, and the enactment of the New Migration Law, which is more protective of the rights of immigrants (Fernandes et al., 2020)..

These moves toward protecting immigrants and refugees were interrupted with the restrictive measures implemented in the context of the pandemic. The Brazilian government opted for absolute prohibition instead of adopting measures such as quarantine or testing that would enable the entry and reception of refugees. Faced with the need to close borders due to the health emergency, other countries have created safeguards to protect the rights of immigrants and refugees. In March, for example, Uruguay decreed the closure of borders but established an exception for the entry of refugees into the country.²⁹

Studies indicate that Venezuelans have suffered the pandemic's consequences more intensely (Fernandes et al., 2020), with job losses and difficulties in entering the country. The ordinances related to the Covid-19 pandemic show a dismantling of policies for the reception and integration of immigrants, placing this already vulnerable population in a situation of greater risk.

²⁷ Delfim, Rodrigo Borges. "Após ação da DPU, Justiça suspende deportação de imigrantes que chegaram ao Brasil a pé." Migra Mundo. August 7, 2020. https://migramundo.com/apos-acao-da-dpu-justica-suspende-deportacao-de-imigrantes-que-chegaram-ao-brasil-a-pe/.

²⁸ Ordinance CC-PR MJSP MINFRA MS N° 419 of August 26, 2020. https://www.in.gov.br/web/dou/-/portaria-cc-pr-mjsp-minfra-ms-n-419-de-26-de-agosto-de-2020-274222561.

²⁹ Decree No. 104/020, art. 2 "g". https://www.impo.com.uy/bases/decretos/104-2020.

PILAR 3:

CONTACT TRACING APPS AND FUNCTION CREEP: IMPACT ON EQUAL ACCESS AND PARTICIPATION OF VULNERABLE GROUPS IN SOCIETY

DATAFIED SOCIAL PROTECTION AND IMPACTS ON VULNERABLE GROUPS

As part of its response to the Covid-19 pandemic, the Brazilian government approved an emergency basic income program to assist those most severely affected (Law No. 13.982/2020). This measure offered about USD120 (BRL600) per month, initially for three months and then the measure was extended until December 2020.

According to the eligibility criteria, unemployed or informal workers who do not receive social security benefits – except those who receive support from Bolsa Família – with a maximum income of USD100 (BRL522.50) per month or a family income of up to approximately USD600 (BRL3,135), may apply.

One of the challenges in implementing the program was identifying eligible informal workers who were not registered in the Single Registry for Social Programs (CADÚnico). According to estimates by the Institute of Applied Economic Research (IPEA), they represent almost 11 million people. On April 7 the government, in partnership with a Federal Bank (Caixa Econômica Federal), launched a website and a mobile application for potential beneficiaries to register and obtain the benefit.

Eligible families already registered in CADÚnico were automatically selected to receive emergency assistance, including those who already participate in the Bolsa Família Program but whose income is lower than the emergency program. For them, cash transfers related to the Bolsa Família are suspended while they receive emergency aid.

THE CASE OF THE EMERGENCY BENEFIT APP

DIGITAL DIVIDE, TECHNOLOGY GAP AND POVERTY

The rate of internet access in Brazil mirrors existing social inequalities, with national access rates at 70% of the population, while the number drops to 49% in rural areas and 48% among the population's lower-income sectors. Additional limitations of devices, such as storage capacity, also restrict the target population's access to the Coronavírus-SUS program through the available digital channels. To respond to this challenge, the government has established a partnership with internet service providers to make the application available for download and use free of charge.

However, in addition to connectivity and infrastructure, another exclusionary difficulty is the deficit in digital literacy and broader illiteracy, which still affects almost 7% of the population. According to interviews, the absence of education on using the application, filling in the fields, and applying for the benefit was an easily avoidable but important barrier to access. There were no further explanations on how to fill in the information fields, such as the family nucleus field, which requests information on mutual economic dependence for the purpose of the emergency assistance.

Social distancing measures also hampered access to professional, community and family assistance when applying for the benefit, receiving information promptly, identifying false information and downloading the correct application. For people registered with CADÚnico, for example, there is no way to upload data remotely meaning people had to go in person to seek social assistance to places that did not have the necessary biosafety measures in place.

Besides the inequalities associated with the digital divide, the requirement to have a CPF number to receive the benefit was questioned, without success, in the Judiciary. To have a regularized CPF, a person must declare their income annually to the tax authorities and participate – or justify their non-participation – in elections (voting is mandatory for people over 18). It is possible to legalize a suspended CPF, but this process may require face-to-face procedures and the payment of a fee.

After the program was launched, thousands of people tried to legalize their documents to receive the emergency income. Difficulties are also evident with the emergency cash transfer. Those without a previous account with the federal bank responsible for delivering the money (Caixa Econômica Federal) became holders of a digital account. In this case, without a debit card, a specific application (called "Caixa Tem") is required, which generates a code to present at the bank in order to withdraw the money. There are, however, several complaints about the functioning of the application, including that it would go offline or fail to generate the code.

Between June and July 2020, the Public Defender's Office entered into an agreement with the Ministry of Citizenship to represent people in administrative proceedings, in addition to the lawsuits that had already been filed. It should be noted that the application has not been submitted for review with other institutions, such as the Federal Public Defender's Office.

THE MIGRANT POPULATION

Particular difficulties confront migrants. For example, a stumbling block arose in filing for emergency assistance, as there was no a field provided for listing foreigners' National Registration Number, which was resolved by filling the identification field for Brazilians with the foreigner's identity document number.

Once this hurdle was sorted out, migrants without a Brazilian identity document found they could not withdraw withdrawing the emergency benefit. This particularly affected those

in the country illegally or with out-of-date documents and persisted even after the Federal Police extended the validity period for expired documents.

Visibility was another issue. There was no indication of nationality on the Covid-19 notification forms. The Public Defender's Office filed a lawsuit which it lost to have a nationality field inserted on forms for notification of cases and deaths.

Despite these obstacles, the right of migrants to health and social assistance has not faced significant resistance during the pandemic; none of our interviewees mentioned situations where services were denied. This is relevant considering the worsening of the economic situation of the migrant population, both due to the economic sector where migrant labor is concentrated (services) and due to the lack of family and community support to cope with the crisis.

RECOMMENDATIONS AND CONCLUSION

SYSTEMATIC OVERSIGHT

The future of public health as well as other public services most likely involves steadily increasing digitalization. This makes it critical for public managers and legislators to be better prepared to evaluate the impact of the regulation and use of technologies on the exercise of rights and what limits and requirements are needed for effective use of these technologies.

At the beginning of the pandemic, before the General Data Protection Law (LGPD) was in force, and the National Data Protection Authority had not been established, oversight measures to control the pandemic were carried out by the Judiciary which served a reactive and corrective role. During this period, there was intense scrutiny of the people who received the emergency aid by the government's control bodies.

Our recommendation is to establish active transparency practices, systematic monitoring and oversight of pandemic measures, especially when they affect rights.

PRIOR IMPACT AND PROPORTIONALITY ASSESSMENT

The General Data Protection Law in force since September 2020 requires accountability measures that guarantee the observance of and compliance with data protection rules by personal data processing agents. Among their obligations, the data controller must conduct a Data Protection Impact Assessment that describes the procedures to be adopted in processing personal data to avoid risks to data subjects' rights (art. 5, XVII). These reports must specify which data are used, processing activities, protection measures, safeguards, and risk mitigation mechanisms.

The preparation and publication of impact reports is an important measure of accountability and transparency, which facilitates access to information for the general public and data subjects. Therefore, it is recommended that public authorities and private entities that collaborate with the government publish impact reports as a good practice of active transparency and accountability.

DATA PROTECTION ADJUSTMENTS

There exists some tension between the General Data Protection Law and infra-legal rules that organize data processing in public administration. These regulations, such as the

Ministry of Health's National Health Information and Informatics Policy and the Decrees 10.046/2019 and 10.047/2019, pay little attention to data protection norms and standards.

The General Data Protection Law must be respected by the infra-legal rules that organize day-to-day activities in public administration. A review and an agenda to incorporate LGPD requirements into existing regulations is therefore recommended.

PRECAUTIONARY PRINCIPLE

The precautionary principle enshrined in art. 191 (2) of the Treaty on the Functioning of the European Union aims to ensure a high level of environmental protection. The classic definition of this principle comes from the Rio Declaration on the Environment and Development (1992), which states that "to protect the environment, States shall widely apply the precautionary approach according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation." As a risk management mechanism, the precautionary principle requires the adoption of control measures in the face of environmental risk and uncertainties. Although its initial conception is related to environmental policy, in practice the precautionary principle has been incorporated in several areas, such as public health and consumer law.

In the context of Covid-19, there are many uncertainties regarding the effectiveness and risks associated with the use of technologies to combat the pandemic, and so it is essential to apply the precautionary principle. According to the Precautionary Principle issued by the European Commission, policies must be informed by three principles:

- (i) scientific assessment with a determination of the degree of scientific uncertainty;
- (ii) risk assessment and assessment of the potential consequences of inaction; and
- (iii) participation of all those interested and affected.

This means that technologies to tackle the pandemic, such as contact tracing and anonymized data heat maps, should consider risk management, based on the precautionary principle. It is incumbent on public authorities to evaluate the scientific controversies concerning these technologies; consider risks such as the re-identification of anonymized data, data leakage, etc.; assess their weaknesses concerning safe processing of such data; and maintain a wide-ranging debate with civil society about the impacts and possible benefits of the technologies.

TRANSPARENCY

Over the years, Brazil has established a robust access to information, under the Law on Access to Information and Transparency Portals. In the pandemic context, such a system proves important as without transparency, there can be no participation or social oversight, or the formulation and discussion of solid and effective public policies.

Therefore, we are concerned about attempts to reduce transparency during the pandemic, either by omitting data or by decreeing the confidentiality of certain matters. Government measures, data on the pandemic and the terms of cooperation with the private sector must actively be made available.

TRANSITIONAL MECHANISMS

Exceptional rules were introduced, emergency regulations were created, and new markets and new economic actors have emerged during the pandemic. In a process analogous to that designed to address serious human rights violations, it may be advisable to consider transitional mechanisms that assess the legacy of these practices and norms, and that promote accountability and reconfiguration so that exceptionality is not perpetuated in the future.

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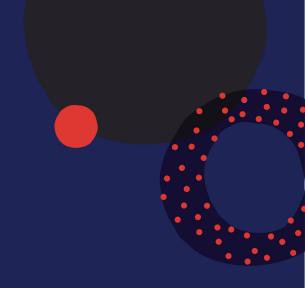
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